

REMARKS

Claims 1-11 are currently pending in the above-identified patent application. In the subject Office Action, the Examiner rejected claims 1 - 11 under 35 U.S.C. 103(a) as being unpatentable over Cianfrocca et al. (Cianfrocca hereinafter) (U.S. Patent No. 6,088,796), in view of Ananian et al. (Ananian hereinafter) (US Patent No. 6,922,701 B1), and further in view of Shapiro (U.S. Patent App. Pub. No. 2006/0005126 A1, filed on October 7, 2002), since regarding claim 1, Cianfrocca discloses a method of managing data in a plurality of disparate and diverse databases (Fig. 1, items 105, and 106, Col. 6, lines 11 – 20, Cianfrocca) comprising: providing a first database located in a first location (Fig. 1, item 105, Col 6, lines 11 – 14, Cianfrocca) and further being located behind a first firewall (Fig. 1, item 104, Col. 6, lines 13 – 14, Cianfrocca); providing a second database located in a second location (Fig. 1, item 106, Col. 6, lines 14 – 17, Cianfrocca) and further being located behind a second firewall (Fig. 1, item 104, lines 14 – 17, Cianfrocca); providing a clearinghouse server (Fig. 1 and 4, item 103, Web Server Running Messenger System, Col. 6 and 17, lines 17 – 20 and 1 – 2; respectively, Cianfrocca) located outside of said first firewall and said second firewall (Fig. 1, item 104, Firewall, Col. 6, lines 19 – 22, Cianfrocca), said clearinghouse server having a clearinghouse database (Fig. 4, Col. 17, line 54, Database, Cianfrocca); providing a workstation located behind said first firewall (Col. 16, lines 24 – 28, Cianfrocca), said workstation having a clearinghouse interface program (Col. 16, lines 27 – 28, clients, Cianfrocca); and establishing communications between said clearinghouse interface program with said clearinghouse server (Col. 16, lines 24 – 26, Cianfrocca).

The Examiner continued that Cianfrocca does not explicitly teach indexing CAD data from the databases, transmitting request for a requested file, determining the location of said requested file, sending a request to second database for said file, converting said file to transmittable format, or transmitting said file. However, the Examiner then asserted that Ananian discloses a method and system for managing CAD data files (Col.2, lines 42 – 47, Ananian), including: a clearinghouse database comprising an index to at least a portion of CAD data in first database and at least a portion of CAD data in second database (Fig. 1, Col. 9 and Col. 11, lines 19 – 23 and 4

– 8, respectively, Ananian); transmitting a request for a requested file from said clearinghouse interface program to said clearinghouse server (Col. 13, lines 14 – 30, Ananian); determining that said requested file is located in said second database by using said clearinghouse database (Col. 14, lines 2 – 4, Ananian); sending a request from said clearinghouse server to said second database for said requested file (Col. 14, lines 35 – 38, Ananian); converting said requested file to a first transmittable format (Col. 3 and 7, lines 37 – 39, and 21 - 27 and 48 – 53; respectively, Ananian).

The Examiner concluded that it would have been obvious to one of ordinary skill in the art at the time the invention was made to add Ananian's functionality for sending and converting a CAD file to the system and method of Cianfrocca to let users manipulate, modify, and update different CAD format files, since one of ordinary skill in the art at the time the invention was made would have been motivated to do so in order to improve interaction between the client and the professionals throughout the construction process, and to ensure consistent and informed client input, cost-effective decisions, while maintaining the client's visionary perspective (Col. 2, lines 10 – 17, Ananian).

In addition, the Examiner stated that the prior art suggests a successful outcome of this combination, such as, significantly reducing the time, complexity and uncertainty involved in the design of a structure (Col. 3, lines 43 – 45, Ananian), improving interaction between the client and the builder throughout the construction process (Col. 3, lines 53 – 55, Ananian), acquiring a fully detailed build specification from a client (Col. 3, lines 58 – 60, Ananian), and reducing lengthy communications between the builder and the client, making the builder efficient and able to focus on the core task: building the house (Col. 3, lines 61 – 64, Ananian).

The Examiner asserted that the combination of Cianfrocca and Ananian discloses all the limitations as discussed above including translating the content; however, the combination of Cianfrocca in view of Ananian does not expressly disclose: without content change of said requested file. However, the Examiner continued, Shapiro discloses converting files to formats without content change of said requested file (Fig. 5, and 6, "Source Artwork ENGLISH", and "Target translated Artwork FRENCH", Page 4, [0051], lines 1 – 20, Shapiro). The Examiner concluded that it

would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Shapiro's teachings to the system of the combination of Cianfrocca in view of Ananian, since a skilled artisan would have been motivated to do so, as suggested by Shapiro (Page 4, [0051], lines 1 – 9, Shapiro), and to efficiently transform location based objects, to convert geographical maps from one language to another, avoiding major re-editing of the source file, but keeping the appearance and quality of the location based translated text. In addition, the Examiner stated that the references (Cianfrocca, Ananian, and Shapiro) teach features that are directed to analogous art in that they are directed to the same field of endeavor, such as, databases management systems, converting CAD data files, and that this close relation between the applied references highly suggests an expectation of success.

Furthermore, the Examiner asserted, the combination of Cianfrocca in view of Ananian and further in view of Shapiro discloses: transmitting said requested file from said second database in said first transmittable format (Col. 20, lines 1 – 6, Ananian).

Regarding Claim 7, the combination of Cianfrocca in view of Ananian and further in view of Shapiro discloses a system for sharing files across disparate databases (Fig. 1, items 105, and 106, Col. 6, lines 11 – 20, Cianfrocca) comprising: a first server located behind a first firewall (Fig. 1, item 104, Col. 6, lines 13 - 14, Cianfrocca) and connected to a first database (Fig. 1, item 105, Col. 6, lines 11 - 14, Cianfrocca) that contains a first set of files (Col. 9, lines 40 - 43, Cianfrocca); a second server located behind a second firewall (Fig. 1, item 104, Col. 6, lines 14 – 17, Cianfrocca) and connected to a second database (Fig. 1, item 106, Col. 6, lines 14 – 17, Cianfrocca) that contains a second set of files(Col. 19, lines 30 – 33, application server components, Cianfrocca); a clearinghouse server (Fig. 1 and 4, item 103, Web Server Running Messenger System, Col. 6 and 17, lines 17 – 20 and 1 – 2; respectively, Cianfrocca) located outside of said first firewall and said second firewall (Fig. 1, item 104, Firewall, Col. 6, lines 19 – 22, Cianfrocca); a clearinghouse database located on said clearinghouse server (Fig. 4, Col. 17, line 54, Database, Cianfrocca) and having an index to at least a portion of said first set of files in said first database and at least a portion of said second set of files in said second database (Fig. 1, Col. 11, lines 4 – 8, Ananian); a workstation located behind said first firewall (Col. 16, lines 24 – 28,

Cianfrocca) and having a clearinghouse interface program capable of interfacing with said clearinghouse database on said clearinghouse server (Col. 16, lines 24 – 28, messenger system enabled application components are programs that call routines in the User Agent Library, Cianfrocca), said clearinghouse interface program further capable of sending a request or a specific file indexed in said clearinghouse database (Col. 13, lines 14 – 26, Ananian); said clearinghouse server further receiving said request for said specific file from said workstation (Col. 13, lines 29 – 30, Ananian), determines that said specific file is located on said second database (Col. 14, lines 2 – 4, Ananian), and sends said request for said specific file to said second server (Col. 14, lines 35 – 38, Ananian); and said second server further receives said request for said specific file (Col. 7, lines 39 – 41, Ananian), locates said specific file in second database (Col. 7, lines 65 – 67, Ananian) converts said specific file into a first transmittable format (Col. 8, lines 4 – 10, Ananian) without content change of said specific file (Fig. 5, and 6, “Source Artwork ENGLISH”, and “Target translated Artwork FRENCH”, Page 4, [00i51], lines 1 – 20, Shapiro), and sends said specific file (Col. 20, lines 1 – 6 Ananian).

Applicants respectfully disagree with the Examiner concerning the rejection of claims 1 and 7 under 35 U.S.C. 103(a) as being unpatentable over Cianfrocca in view of Ananian, and further in view of Shapiro for the reasons to be set forth hereinbelow.

The Examiner also rejected dependent claims 2-6 and 8-11 which depend from independent claims 1 and 7, respectively, under 35 U.S.C. 103(a) as being unpatentable over Cianfrocca in view of Ananian, and further in view of Shapiro. Since applicants believe that claims 1 and 7 are patentable over Cianfrocca in view of Ananian for the reasons to be set forth hereinbelow, applicants believe that no response is required concerning dependent claims 2-6 and 8-11.

Turning now to the rejection of claims 1 and 7 under 35 U.S.C. 103(a) as being unpatentable over Cianfrocca in view of Ananian, the preamble of claim 1 recites in part: “A method of managing CAD data in a plurality of disparate and diverse databases . . . ,” while that for claim 7 recites in part: “A system for sharing files across disparate databases” Both claims as earlier amended require that the content of said files remains unaltered.

The Abstract of Ananian recites: “A method for generating an interactive profile of a structure, such as a building, employing an interactive profile system … A plan set, usually in a CAD format, is received into the interactive profile system, typically submitted by the user or client. … The plan set is converted to a profile data set by the profiling engine. … The profiling engine performs a systematic enhancement of the plan set, building upon the elemental physical descriptions of the plan set. … The user directs a profile query to the application engine of the interactive profile system. … .” (Emphasis added by applicants.).

Ananian, beginning in Col. 2, line 62 and ending on Col. 3, line 8, sets forth: “To expand the received plan set into the building’s profile database, the plan set is converted to a profile data set by the profiling engine. The profile data set is compliant with an enhanced data protocol, which is a specific format for organizing the profile data set in a standardized array. The profiling engine ‘parses’ or extracts, the profile data set to develop and link the plurality of potentially interrelated building components to develop a plurality of interrelated components. The profiling engine performs a systematic enhancement of the plan set, building upon the elemental physical description of the plan set. Each element of the physical description is functionally analyzed for relational attributes and then expanded. Links are created within the profile data set, between related components.” (Emphasis added by applicants.).

In footnote number 5 of subject Office Action, the Examiner stated that: “According to the Academic Press Dictionary of Science and Technology from Elsevier Science & Technology, ‘translate’ means: “1. To convert from one computer language to another. 2. Generally, to convert information from one form to another without altering meaning or function.” From the quotations from Ananian in the previous two paragraphs, it is clear that the plan set submitted by the user **is modified** by the profiling engine of Ananian.

Additionally, although a translation may convert a file from one computer language to another, generally without altering the meaning or function, if one reviews the actual language used in Ananian set forth in the following paragraph, it is clear that: (1) Ananian is referring only to the data file in the plan set, not the entire plan set; and (2) even if the language of the data file is changed, additional changes are **intended** to

be made such as correction of the level, color, line style, and line weight to match the enhanced data protocol utilized by the profiling engine.

Column 7, lines 4-15, of Ananian state that: "It is possible that a digital file comprising the plan set 50 can be collected without linked attributes, as would be required for 'non-Microstation' software application such as AutoCAD™ The data file of the plan set can be translated, either manually or with the aid of a program, to the correct level, color, line style, and line weight to match the enhanced data protocol utilized by the profiling engine 30. This standardized protocol, preferably in CAD format, or alternatively an SVG (scalable vector graphic) format, facilitates linkage and extraction to the enhanced profile database 40." (Emphasis added by applicants.).

Column 4, lines 57-60 of Ananian states: "The generation of the interactive, enhanced profile database 40 is a key element of the present invention. To begin the formulation of the enhanced profiles, a plan set 50 is received into the interactive profile system 10." In Col. 6, lines 39-46, of Ananian it is stated: "For the present invention, the enhanced data protocol is an internally standardized profile database format that enables the plan set 50 to be expanded and utilized by the interactive profile system 10. . . . The plan set is converted to the standardized data set by the profiling engine 30 of the interactive profile system." (Emphasis added by applicants.).

Column 13, lines 15-37 recite: "The user 25 can direct a profile query 177 to the application engine 20 of the interactive 16 profile system 10, as shown in FIG. 1. The term "query" is broadly interpreted to include requests to modify records of the enhanced profile database. . . . Therefore, the term "query" can also apply to an inquiry into the enhanced profile database, relating to a specific component or to the interrelationship between one or more building components. The application engine 20 responds to the profile query 177 with a profile response 178. The profile response includes a listing of at least one of the plurality of interrelated elements of the enhance profile database 40. These interrelated elements can be associated, related or grouped in any report format that the user 25 requires. The profile response to the profile query is sent to the user, preferably over the Internet to the web browser of the user." (Emphasis added by applicants.). Column 14, lines 34-44, state: "After the application engine 20 receives the profile query 177 from the user 25, the application engine then

generates a search based upon the profile query. The profile query may be a request for a listing of component or a “what if” request. The application engine preferably transmits to profile results **178** of the profile query in the form of a report. If, however, the user **25** submits a profile query **177** that modifies a record **170**, as would be performed if the user requires or desires a change to a component of the project **130**, a data set revision **120** order can be generated by the application engine **20**, as shown in FIG. 1.” (Emphasis added by applicants.).

Thus, in the principal embodiment of the invention of Ananian, **the user receives a report** from the interactive profiling system in response to a user inquiry. Moreover, **the user's original plan is converted to a standardized data set, which may be very different from what was originally submitted by the user.**

In Col 20, lines 2-11, of Ananian it is stated that: “As an alternative embodiment of the present invention, the interactive profiling system 10 can export the profiled plan set 50, preferably in CAD format, so that the user **25** can call up the plan from within a profile manager if they ever need to review it for future projects. After subscribing to the interactive profiling system, the user can access any user-submitted plan set **50**, which are all available in CAD format, or any other appropriate format, for export. The exported CAD file can also be helpful to the builder during the project management phase.” (Emphasis added by applicants.). If the user wishes, the profiled plan set **50** may be sent to the user. **This plan is not plan set 50, originally sent by a user.** Subject claims 1 and 7, as amended, recite that the user is sent a requested file converted into transmittable form, not one that is “profiled” or otherwise modified, as required by the teachings of Ananian.

Thus, since the user cannot manage CAD data in a plurality of disparate and diverse databases (subject claim 1) or **share** files across disparate databases (subject claim 7) without modification of the content thereof, applicants believe that Ananian clearly teaches away from the present claimed invention. This is not remedied by the teachings of Cianfrocca and applicants respectfully believe that the combination by the Examiner of Cianfrocca with Ananian does not render obvious the present claimed invention.

Turning to the Examiner's statements that: (1) the combination of Cianfrocca and Ananian discloses all the limitations as discussed above including translating the content; (2) the combination of Cianfrocca in view of Ananian does not expressly disclose: without content change of said requested file; (3) Shapiro discloses converting files to formats without content change of said requested file (Fig. 5, and 6, "Source Artwork ENGLISH", and "Target translated Artwork FRENCH", Page 4, [0051], lines 1 – 20, Shapiro); and (4) that it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the Shapiro's teachings to the system of the combination of Cianfrocca in view of Ananian, since a skilled artisan would have been motivated to do so, as suggested by Shapiro (Page 4, [0051], lines 1 – 9, Shapiro); and to efficiently transform location based objects, to convert geographical maps from one language to another, avoiding major re-editing of the source file, while keeping the appearance and quality of the location based translated text.

Applicants respectfully disagree with the Examiner's interpretation of the Shapiro reference, and wish to direct the Examiner's attention to the following paragraphs of Shapiro: (a) in the ABSTRACT, it is stated: "A method of transforming location based objects, such as text, included in a digital source Artwork file, for example a geographical map file, and creating a **transformed** target Artwork file. ... The required transformations are then operated on the extracted objects, partly manually but also automatically creating a transformed second intermediate database, which is subsequently integrated with the source file to create a target file, which represents, for example, **a new map with translated text on new layers.**" (Emphasis added by applicants.); (b) Paragraph [0001] states: "There are many software packages available for professional creation, layout and editing of drawings, illustrations and images, together with text, henceforth such hybrid documents will be generally referred to, as known in the art, as Artwork."; (c) Paragraph [0015] states: "The present invention deals with capabilities, limitations and deficiencies of currently available Artwork programs when the purpose is to externally apply changes in an efficient way, whether these changes are, location attributes and/or style attributes of textual and non-textual objects to one or more objects in Artwork, as well as to externally add new objects to an existing Artwork file as a result of calculations or transformations externally applied to

the original objects." (Emphasis added by applicants.); (d) Paragraph [0031] states: "Target language text may also require change of fonts, appropriate fonts may have to be selected, obtained and installed in the designer's computer. Additional operations may also be required from the Designer such as specifying, creating and naming new styles and layers. Text in one language is rarely similar to the same text in another language as to the number of characters and words. Designer intervention may further be required in order to manipulate target language text alignment, placement and attributes such as character size and weight, kerning etc." (Emphasis added by applicants.); and (e) Paragraph [0039] states: "Therefore, when changing the language of the Artwork file, for example when creating a new version of a map in another language, it may be advantageous not to start 'from scratch' from the original data and replace the text into the other target language via the GIS database, but from the then-final version of the Artwork file and introduce whatever language specific changes are necessary in that file. Recreating the map and introducing the same displacements, relocations and typographical changes to the elements in the map is very costly and inefficient. It is frequently more economical and therefore advisable to start with the artwork file, which already contains the necessary changes due to overlaps, collisions and like considerations, together with culture-driven changes, and to change that file according to the new requirements-be it translation into another language, a newer version, the correction of certain parameters and changes in some objects."

Paragraph [0051], cited by the Examiner states: "The object of the invention is to provide an integrated expert system for efficiently transforming location based objects, such as text or graphic objects, included in a digital source Artwork file, for example a geographical map file or a CAD design, and creating a transformed target Artwork file. The method is particularly advantageous in converting geographical maps from one language to another, avoiding major re-editing of the source file, but keeping the appearance and quality of the location based translated text. The method include tools for extracting required location based objects, for example, text elements, form the source file, including all pertaining information into a first intermediate structured database, represented for the user as, for example, a table. The required transformations are then operated on the objects stored in the table, partly manually but

also automatically creating a transformed second intermediate database, which is subsequently integrated with the source file to create a target file, which represents, for example, a new map with translated text objects **on new layers.**" (Emphasis added by applicants.).

Thus, Shapiro does not merely teach the efficient transformation of location based objects to convert geographical maps from one language to another, but rather may add new objects and layers to an existing Artwork file as a result of calculations or transformations externally applied to the original objects.

In addition, the Examiner stated that the references (Cianfrocca, Ananian, and Shapiro) teach features that are directed to analogous art and they are directed to the same field of endeavor, such as, databases management systems, converting CAD data files, and that this close relation between the applied references highly suggests an expectation of success. Applicants respectfully disagree with the Examiner that there would be any teaching, suggestion or motivation for one having skilled in the art to combine Shapiro with Ananian for the reasons cited by the Examiner, since Shapiro clearly teaches that changes are made to the files. The Federal Circuit ruled in *In re Kahn* (Fed. Cir. No. 04-1616, March 22, 2006), that a Board of Patent Appeals and Interferences must articulate the motivation, suggestion or teaching that would have led the skilled artisan at the time of the invention to combine prior art elements to make the claimed invention. To establish a *prima facie* case of obviousness based on a combination of prior art elements, "the Board must articulate the basis on which it concludes that it would have been obvious to make the claimed invention, When the Board does not explain the motivation, or the suggestion or teaching, that would have led the skilled artisan at the time of the invention to the claimed invention as a whole, we infer that the Board used hindsight to conclude that the invention was obvious."

Assuming, for the purpose of discussion, that Shapiro teaches that no changes are required in order to cerate a transformed target Artwork file, Ananian requires that the plan set is **converted to the standardized data set** by the profiling engine **30** of the interactive profile system. By combining Shapiro with Ananian, then, the Examiner has created a combination which cannot work; that is, Ananian requires a change to the original plan set, while the Examiner argues that Shapiro does not. Section 2145 of the

Manual of Patent Examining Procedure states that: "It is improper to combine references where the references teach away from their combination."

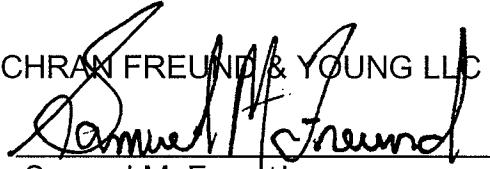
Thus, applicants believe that the Examiner has failed to make a proper *prima facie* case for obviousness as is required under 35 U.S.C. 103(a) by combining the Ananian, Cianfrocca, and Shapiro references as described hereinabove.

In view of the discussion presented hereinabove, applicants believe that subject claims 1-11 are in condition for allowance or appeal, the former action by the Examiner at an early date, being earnestly solicited.

Reexamination and reconsideration are respectfully requested.

Respectfully submitted,

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